

# **MODIS TECHNICAL TEAM MEETING**

**July 27, 1995**

The MODIS Technical Team Meeting was chaired by Vince Salomonson. Present were David Herring, Bruce Guenther, Dick Weber, Bill Barnes, Harry Montgomery, Dorothy Hall, Rosemary Vail, Locke Stuart, Wayne Esaias, Yoram Kaufman, and Ed Masuoka.

## **1.0 SCHEDULE OF EVENTS**

Aug. 1 - 2 MCST Software Test Readiness Review  
Aug. 3 Adobe Acrobat demonstration by David Herring to the Technical Team  
Aug. 8 MODIS Transient Response Presentation, at GSFC Bldg. 16, room 236 (\*Science Team and other invited Team members only.)  
Aug. 31 Data Quality Assurance Presentation by Bob Lutz to the Technical Team  
Sept. 6 - 7 MODIS Calibration Peer Review at SBRC  
Sept. 13 - 14 Snow and Ice Workshop, first day in Reston and second day at GSFC  
Sept. 14 "MODIS-light" Follow-up Presentation by Paul Westmeyer and Steve Neeck to the Technical Team  
Nov. 13 - 17 MODIS Science Team Meeting at GSFC

## **2.0 MINUTES OF THE MEETING**

### **2.1 Transient Response in MODIS**

Weber announced that SBRC will be at GSFC on Aug. 8 for a discussion of MODIS transient response. Salomonson encouraged representatives from each science discipline group to attend the meeting.

Salomonson asked how the transient response in MODIS will compare to that of AVHRR. Weber responded that we need comparable AVHRR data to make that comparison. He also stated that SBRC will bring some MODIS EM test data to the Aug. 8 meeting.

### **2.2 MODIS Project Reports**

Weber announced that there will be a software review on Aug. 1 at SBRC.

He reported that the new LWIR focal plane assembly was recently delivered to SBRC. This new focal plane filter replaces the one that was scratched. Unfortunately, SBRC recently discovered a scratch on the SW/MWIR focal plane

filter. SBRC is simultaneously working on two fixes: (1) paint and polish the scratch, and (2) build a new replacement SW/MWIR filter.

#### **2.2.1 Solar Test Proposed for Protoflight Model (PFM)**

Weber reported that Tom Pagano, of SBRC, proposed a solar test that could be conducted on the PFM solar diffuser. Pagano's idea is to place the MODIS PFM in an intermediate, semi-clean room adjacent to SBRC's high bay clean room. The PFM would be wrapped in protective plastic. The door to the room leading outside can be opened to allow sunlight in via a mirror located outside. Weber stated that Phil Slater is enthusiastically supportive of Pagano's proposal; however, the idea must also be approved by Lee Tessmer, of Hughes.

#### **2.3 MCST Reports**

Guenther reported that according to current plans, MCST will be responsible for producing an algorithm that will process some 10K to 15K Level 1B coefficients. He recognized that MCST may need to limit its algorithm to a more manageable number of coefficients.

#### **2.4 SDST Reports**

Masuoka reported that he attended the EOSDIS Release B Requirements Review. SDST's coverage of the review was more limited than Masuoka would have preferred due to overlap with the MODLAND/SDST meeting, illness of the SDST system architect, and reports due from the SDST Review. Masuoka and Glenn were able to cover the critical sessions on Science Data Processing, Networking and the Data Server. Masuoka will prepare an e-mail to the Science Team software developers regarding the availability of the Scheduler software.

Masuoka told the Team that Al Fleig, Barbara Putney, Catherine Harnden, and Steve Ungar are currently attending the Land Group's retreat at Boston University.

#### **2.5 MODIS Document Development and Distribution**

Herring distributed his "Proposed Plans for MODIS Document Distribution and Information Management" (Attachment 1). This report provides a review of some noteworthy archive and distribution systems in place, both at GSFC and abroad, as well as some commercial applications that have been and/or may be procured to enhance MODARCH.

In his summary presentation (Attachment 2), Herring recommended that the MODIS Team adopt standards for document development and distribution. For word processing, he feels the Team should use the latest versions of either Microsoft Word (available for Mac and PC) or WordPerfect (available for Mac, PC, and UNIX platforms). These applications contain filters enabling the transfer of documents independent of platform. Rich Text Format (RTF) is a built-in option in MS Word and WordPerfect any time authors wish to "Save" a document--this format was specifically created to maintain the appearance of

documents even if they are transferred between platforms. Both MS Word and WordPerfect have filters for opening RTF files.

For presentations, Herring recommends that the Team use Microsoft PowerPoint, which also allows users to save in RTF. Team members creating presentations in any other application should make sure that it too has the ability to save as RTF.

For integration into documents, images and graphics should be saved as Encapsulated PostScript (EPS) files. EPS is compatible with MS Word, WordPerfect, and MS PowerPoint. For placement on the World Wide Web, images and graphics should be saved in either GIF or JPEG format.

MODARCH's Electronic File System (EFS) software has filters for MS Word, WordPerfect, and MS PowerPoint. Therefore, any document created using one of these applications--even if it is saved in RTF--can be uploaded into the archive and then viewed using that same application. (For details, refer to Attachment 1.)

Herring recognizes that some Team members and SBRC personnel may not wish, or may be unable, to use one of these recommended applications. To accommodate these personnel, MAST procured another solution that still enables platform-independent electronic file distribution--Adobe's Acrobat applications. Acrobat Exchange allows authors to print Portable Document Format (PDF) files (instead of printing to a physical printer) that are exact copies of the original document. Anyone with Acrobat Reader (freely distributed software) or Acrobat Exchange, may open, navigate through or print PDF files. Acrobat software is available for Mac, PC, and Sun OS or Sun Solaris (UNIX) platforms.

Herring pointed out that EFS will soon have filters in place for uploading PDF files into MODARCH. Because PDF is platform-independent and provides a new, electronic lowest-common-denominator for document distribution, MAST is procuring copies of Acrobat Exchange for each Science Team member. Moreover, Herring recommends that PDF be adopted as a new "standard" for distribution. Each MODIS support team, as well as SBRC, should procure copies of Exchange for themselves so that eventually PDF will supersede hardcopy distribution. (\*Note: Acrobat is not a word processor, and therefore does not have tools for making content or format changes once a document is in PDF.)

### **3.0 ACTION ITEMS**

#### **3.1 Action Items Carried Forward**

1. *Herring*: Prepare a response to Mouginis-Mark's request to provide a short (one page) statement on how each MODIS Science Team member's investigation(s) contribute to the educational objectives of MTPE and EOS.

2. *Herring*: Collect specific questions from MODIS Team members to forward to Steve Neeck and Paul Westmeyer, so that they may incorporate responses into their next presentations, tentatively scheduled for Aug. 17.
3. *Masuoka*: Cost out bringing up a MODIS test string in January 1996 at EDC and forward the information to Steve Kempler.
4. *Discipline Group Leaders*: Identify contacts with appropriate IDS investigators, and encourage regular interaction.
5. *MCST*: Consider Yoram Kaufman's concerns and prepare an explanation or brief presentation for the Technical Team as to which unit is best suited for MODIS' Level 1 data--radiance or reflectance.
6. *MAST*: Begin preparing the Agenda for the next MODIS Science Team Meeting--begin planning topics for 2-hour to half a day roundtable discussions and team members to moderate them. Also, allow time for a 1- to 1.5-hour Discipline Group Splinter Session on the first day.
7. *Dave Diner & Ed Masuoka*: MODIS and MISR need to settle on a protocol(s) to deal with Level 1 and Level 2 data sets to be passed between the two teams to produce joint products. Report at the next SWAMP Meeting.
8. *Guenther*: Report the modeled results of the 1,000K source for SBRC's integration and alignment collimator to the Technical Team. [These data are forthcoming.]
9. *Fleig and Ungar*: Interact with the group leaders to develop a MODIS data simulation plan for review at the next Science Team Meeting. [Work on this item is still in progress. Simulated data are now available via FTP, and a white paper is forthcoming from Fleig.]

#### 4.0 ATTACHMENTS

**NOTE: The attachments referenced below are maintained in the MODARCH file transfer protocol (FTP) site and are available in the "/pub/TECHTEAM". Please contact David Herring, MAST Technical Manager, at (301) 286-9515, Code 920, NASA/Goddard Space Flight Center, Greenbelt, MD 20771 if you desire copies of any attachments.**

1. Proposed Plans for MODIS Document Distribution and Information Management, by David Herring (called MAST\_Doc\_Plan.pdf)
2. Presentation on Short- and Long-Term Strategies for MODIS Document Distribution and Information Management, by David Herring (called MAST\_Doc\_Presentation.pdf)

#### 5.0 RECENT MODIS DOCUMENTS

**Note: All recent MODIS documents are maintained in MODARCH. If you would like access to or information about MODARCH, please contact the MODARCH System Administrator, Michael Heney, at (301) 286-4044 or via e-mail at mheney@ltpmail.gsfc.nasa.gov.**

1. EOSDIS Data Products Reference Guide, by Steve Wharton and Monica Myers  
(Currently for Science Team member review only.)